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Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number 10/001,710

Filing Date October 31, 2001

First Named Inventor Shlomo Ben-Hairm

Art Unit 3762

Examiner Name C.H. Layno

Attorney Docket Number 501049.20506 (20066.86)

			U. S. PATENT	DOCUMENTS	CLASS / SUB.
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f Anown)}	Publication Date MM-DO-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
(H1		^{US-} 4,554,922	11-26-1985	Prystowsky et al.	607/14
1		^{US-} 5,871,506	02-16-1999	Mower	607/9
		US- 5,913,876	06-22-1999	Taylor et al.	607/5
		^{US-} 6,006,134	12-21-1999	Hill et al.	607/9
		^{US-} 5,735,876	04-07-1998	Kroll et al.	607/2
4		^{US-} 5,205,284	04-27-1993	Freeman	607/10
CHL		^{US-} 6,317,631	11-13-2001	Ben-Haim et al.	607/9
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	-	FORE	IGN PATENT DOCU	MENTS		
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					Application Number	10/001,710		
INFORMATION DISCLOSURE					Filing Date	October 31, 2001		
S	STATEMENT BY APPLICANT				First Named Inventor	Shlomo Ben-Haim		
					Art Unit	3762		
(Use as many sheets as necessary)					Examiner Name	C.H. Layno		
She	eet	2	of	4	Attorney Docket Number	501049.20506 (20066.86)		

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CHL	U	R, RANJAN & N.V. THAKOR (1995) Annals of Biomedical Engineering 23: pps 812-821 "Electrical Stimulation Of Cariac Myocytes"	150	•••••
CM		N. NANNINI & K. HORCH (1991) IEEE Transactions on Biomedical Engineering 38: pps 769-776: "Muscle Recruitment With Intrafascicular Electrodes"	HNOLOG	# ?:
Сm		D.M. BERS (1991) "Excitation Contraction Coupling And Cardiac Contractile Force"; Chapter 2, pg 17, Kluwer Academic	A CEM	
Cttz	J	S.B. KNISLEY et al. (19912) Circulation Research 70: pgs 707-715 "Effect Of Field Stimulation On Cellular Repolarization In Rabbit Myocardium"	EKKSY))) 1
CH	J	S.M. DILLION (1991) Circulation Research 69: pps 842-856; "Optial Recordings In The Rabbit Heart Show That Defibrillation Strength Shocks Prolong The Duration Of"	4	>
CM	J	J. FLEISCHHAUER et al. (1995) Circulation 92: pps 587-594; "Electrical Resistances Of Interstitial And Microvascular Space As Determinants Of The Extracellular Electrical"		
Сщ	1	A. TANIGUCHI et al.; Am. J. Physiol. pg 267: H694-H705; "Inhomogeneity Of Cellular Activation Time And Vmax In Normal Myocardial Tissue Under Electrical Field"		
CH		R. LUBART et al. (1992) J. Photochemical Photobiology B 14; pps 337-341 "Effect Of Light On Calcium Transport In Bull Sperm Cells"		
Ch	1	V.A. LOGINOV (1992) Aviakosm Ekolog Med 26: pgs 49-51; "Accumulation Of Calcium lons In Myocardial Sarcoplasmic Reticulum Of Restrained Rats Exposed To The"		
Ch	1	J.L. SCHWARTZ et al. (1990) Bioelectromagnetics 11: pps 349-358; "Exposure Of Frog Hearts To CW Or Amplitude-Modified VHF Fields: Selective Efflux Of Calcium Ions"		

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CHL	/	E. LINDSTROM et al. (1995) Bioelectromagnetics 16: pps 41-47: "intracellular Calcium Oscillations In A T-Cell Line After Exposure To Extremely-Low-Frequency Magnetic"	
CHL	V	V.A. LOGINOV et al. (1991) Kosm Biol Aviakosm Med 15; pps 51-53; "Effects Of An Impulse Electromagnetic Field On Calcium Ion Accumulation In The Sarcoplasmic"	
CHL	/	L.A. COULTON & A.T. BARKER (1993) Phys. Med. Biol. 38; pps 347-360; "Magnetic Fields And Intracellular Calcium; Effects On Lymphocytes Exposed To Conditons For"	
CH	/	A. PUMIR et al. (1994) Proc. R. Soc. Lond. B. Biol. Sci. 257; pps 129-134; "Control of Rotating Waves In Cardiac Muscle: Analysis Of The Effect Of Electric Fields"	MAR
CHZ	/	M. SBLOMONOW et al. (1983) Am. J. Physical Medicine 62: pps 71-82; "Control Of Muscle Contractile Force Through Indirect High-Frequency Stimulation"	0 2
Cin	/	J.D. BRONZINO (1995) "Biomedical Engineering Handbook", Chapter 82.5; pg 1288, "IEEE press/CRC press"	2004
СH	/	J.R. WINDLE et al. (1986) Am. J. Cardiol. 57: pps 381-386; "Subthreshold Conditioning Stimuli Prolong Human Ventricular Refractoriness"	
CHL	1	M. FROMER & M. SHENASA (1992) J. Am. Coll. Cardio. 20; pps 879-883; "Ultrarapid Subthreshold Stimulation For Termination Of Atriventricular Node Reentrant Tachycardia"	
CH	1	B. SKALE et al. (1985) J. Am. Coll. Cardiol. 6: pps 133-140; "Inhibition Of Premature Ventricular Extrastimuli By Subthreshold Conditioning Stimuli"	
Citz	/	M. YOKOYAMA (1976) Japanese HEart Journal 17; pps 315-325; "The Phase Of Supernormal Excitation In Relation To The Strength Of Subthreshold Stimuli"	

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Art Unit

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CH	/	CHENG et al (1993) Science 262; October 29; "Calcium Sparks: Elementary Events Underlying Excitation-Contraction Coupling In Heart Muscle"	
Citr	/	STEVENSON et al.; Am J. Cardiol. 57; (6) "Electrophysiological Characteristics Of Ventricular Tachycardia Or Fibrillation In Relation To Age Of Myocardial Infarction"	

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